



## Complete Summary

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### GUIDELINE TITLE

Lower extremity (hip, knee and ankle).

### BIBLIOGRAPHIC SOURCE(S)

Expert Clinical Benchmarks. Lower extremity (hip, knee and ankle). King of Prussia (PA): MedRisk, Inc.; 2004. 55 p.

### GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis

RECOMMENDATIONS

EVIDENCE SUPPORTING THE RECOMMENDATIONS

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IMPLEMENTATION OF THE GUIDELINE

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

## SCOPE

### DISEASE/CONDITION(S)

Work-related lower extremity (hip, knee & ankle) injury

### GUIDELINE CATEGORY

Treatment

### CLINICAL SPECIALTY

Chiropractic

Family Practice

Orthopedic Surgery

Physical Medicine and Rehabilitation

### INTENDED USERS

Physical Therapists  
Physicians  
Utilization Management

#### GUIDELINE OBJECTIVE(S)

To offer evidence-based ranges of appropriate treatment of workers' compensation conditions

#### TARGET POPULATION

Workers with functional impairment due to work-related lower extremity (hip, knee, and ankle) injury

#### INTERVENTIONS AND PRACTICES CONSIDERED

1. Activities of daily living (ADL) training (home)
2. Aerobic capacity/endurance conditioning or reconditioning
3. Assistive devices
4. Balance, coordination, and agility training
5. Biofeedback
6. Body mechanics and postural stabilization
7. Compression therapies
8. Cryotherapy
9. Electrical stimulation
10. Electrotherapeutic delivery of medications
11. Flexibility exercises
12. Functional training programs (home and work)
13. Gait and locomotion training
14. Hydrotherapy
15. Instrumental ADL (IADL) training (home and work)
16. Injury prevention and reduction (home and work)
17. Leisure and play activities and training (work)
18. Mobilization/manipulation
19. Neuromotor development training
20. Orthotic devices
21. Passive range of motion
22. Prosthetic devices
23. Protective devices
24. Sound agents
25. Strength, power, and endurance training
26. Supportive devices
27. Thermotherapy

#### MAJOR OUTCOMES CONSIDERED

- Pain relief
- Functional status
- Return to work/sport
- Range of motion/strength
- Swelling
- Patient satisfaction

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

During 2001, the guideline developers began to formally collect and archive systematic reviews and other studies, using the Cochrane Collaboration and the PEDro systematic review methodology.

During the comprehensive medical literature review, preference was given to high quality systematic reviews, meta-analyses, and clinical trials over the past ten years, plus existing nationally recognized treatment guidelines from the leading specialty societies.

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

Expert Consensus (Committee)

Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Expert Clinical Benchmark (ECB) System for Grading of Evidence

I - Evidence from at least 1 properly randomized controlled trial (RCT)

II-1 - Evidence from well-designed controlled trials without randomization

II-2 - Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 center or research group

II-3 - Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments could also be included here.

III - Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees

Adapted from: Sackett D. Rules of evidence and clinical recommendations for the management of patients. Can J Cardiol 1993; 9:487-9.

### METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses  
Systematic Review  
Systematic Review with Evidence Tables

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus  
Expert Consensus (Consensus Development Conference)

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Expert Clinical Benchmark (ECB) System for Grading of Recommendations

A - Good evidence to support the recommendation that the intervention be specifically considered

B - Fair evidence to support the recommendation that the intervention be specifically considered

C - Poor evidence regarding inclusion or exclusion of an intervention, but recommendations may be made on other grounds

Adapted from: Sackett D. Rules of evidence and clinical recommendations for the management of patients. Can J Cardiol 1993; 9:487-9.

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing  
Clinical Validation-Trial Implementation Period  
Comparison with Guidelines from Other Groups  
External Peer Review  
Internal Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline developers, where appropriate, compared specific body part musculoskeletal dysfunction to existing United Kingdom and Dutch treatment guidelines.

Beginning in 2001, the guidelines were also compared to actual practice patterns in 120,000 workers' compensation claims (MedRisk, Inc) to determine their reasonableness of fit within the realm of clinical practice.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

#### General

1. During the initial evaluation, the therapist should include questions about work task requirements in the patient history interview and incorporate these findings in the treatment objectives.
2. The therapist's treatment regimen should be directed toward improving the patient's functional ability rather than based on the patient's impairment.
3. The therapist's treatment regimen should emphasize active interventions over passive modalities and should become less frequent toward the end of the episode of care in order to encourage patient behavioral gains.

#### Non-Surgical

For non-surgical lower extremity (hip, knee, and ankle) conditions, a series of physical therapy treatments should be delivered ranging from 10 to 24 visits over a period of 6 to 12 weeks, depending upon severity (see table below). Refer to the original guideline document for recommendations on the time, choice, and sequence of interventions, as well as interventions that are generally recommended, interventions recommended on a case specific/clinical judgement basis, and interventions that are not recommended. Specific interventions are listed in the "Interventions and Practices Considered" field in the Complete Summary.

#### Surgical

For surgical lower extremity (hip, knee, and ankle) conditions, a series of physical therapy treatments should be delivered ranging from 16 to 28 visits over a period of 6 to 15 weeks, depending upon severity (see table below). Refer to the original guideline document for recommendations on the time, choice, and sequence of interventions as well as interventions that are generally recommended, interventions recommended on a case specific/clinical judgement basis, and interventions that are not recommended. Specific interventions are listed in the "Interventions and Practices Considered" field in the Complete Summary.

#### Pre-Cert Product Treatment Patterns -- No Regional Adjustments

|  | Surgical | Non-Surgical |
|--|----------|--------------|
|--|----------|--------------|

|                     | Total Visits | Sequence of Visits                     | Total # Weeks | Total Visits | Sequence of Visits       | Total # weeks |
|---------------------|--------------|--|---------------|--------------|--------------------------|---------------|
| Acute/Non-delayed   |              |  |               |              |                          |               |
| Non-complicated     | 16           | 3V @ 3 wks<br>2V @ 2 wks<br>1V @ 3 wks | 8 weeks       | 12           | 2V @ 6 wks               | 6 weeks       |
| Complicated         | 28           | 3V @ 4 wks<br>2V @ 6 wks<br>1V @ 4 wks | 14 weeks      | 18           | 3V @ 2 wks<br>2V @ 6 wks | 8 weeks       |
| Acute Delayed       |              |  |               |              |                          |               |
| Complicated         | 28           | 3V @ 3 wks<br>2V @ 7 wks<br>1V @ 5 wks | 15 weeks      |              |                          |               |
| Chronic/Non-delayed |              |  |               |              |                          |               |
| Non-complicated     | 16           | 3V @ 4 wks<br>2V @ 2 wks               | 6 weeks       | 10           | 2V @ 4 wks<br>1V @ 2 wks | 6 weeks       |
| Complicated         | 28           | 3V @ 3 wks<br>2V @ 7 wks<br>1V @ 5 wks | 15 weeks      | 24           | 2V @ 12 wks              | 12 weeks      |
| Chronic Delayed     |              |  |               |              |                          |               |

|             | Surgical     |  |               | Non-Surgical |                    |               |
|-------------|--------------|--|---------------|--------------|--------------------|---------------|
|             | Total Visits | Sequence of Visits                     | Total # Weeks | Total Visits | Sequence of Visits | Total # weeks |
| Complicated | 28           | 3V @ 4 wks<br>2V @ 5 wks<br>1V @ 6 wks | 15 weeks      |              |                    |               |

#### CLINICAL ALGORITHM(S)

None provided

#### EVIDENCE SUPPORTING THE RECOMMENDATIONS

##### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations were based primarily on a comprehensive review of published reports. In cases where the data did not appear conclusive, recommendations were based on the consensus opinion of the group.

#### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

##### POTENTIAL BENEFITS

These guidelines provide detailed direction on the time, choice, and sequence of physical therapy services directed toward recovery of functional ability and return to work.

##### POTENTIAL HARMS

Not stated

#### IMPLEMENTATION OF THE GUIDELINE

##### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

#### INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

##### IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Expert Clinical Benchmarks. Lower extremity (hip, knee and ankle). King of Prussia (PA): MedRisk, Inc.; 2004. 55 p.

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2004

### GUIDELINE DEVELOPER(S)

Expert Clinical Benchmarks - Private For Profit Organization

### SOURCE(S) OF FUNDING

Expert Clinical Benchmarks

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee Chair: Roger Nelson, PhD, PT, FAPTA (MedRisk, Inc.)

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline.

## GUIDELINE AVAILABILITY

The Expert Clinical Benchmarks (ECB) Physical Therapy Clinical Guidelines are available in electronic form to subscribers from the [Expert Clinical Benchmarks Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

None available

## PATIENT RESOURCES

None available

## NGC STATUS

This NGC summary was completed by ECRI on January 12, 2005. The information was verified by the guideline developer on January 21, 2005.

## COPYRIGHT STATEMENT

This NGC summary is based on the original guideline, which is subject to the guideline developer's copyright restrictions.

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